

# Solving Quadratic Equations by Factoring name \_\_\_\_\_

Solve each of the quadratic equations below. Put each in standard form first by setting the equation equal to zero.

1.  $x^2 - x = 12$

9.  $a^2 - 5a + 8 = 14$

17.  $x^2 - 4x - 10 = 35$

2.  $y^2 + 2y = 15$

10.  $b^2 - b = 20$

18.  $a^2 + 2a = 8$

3.  $b^2 - 4b - 2 = 10$

11.  $c^2 + 9c = -14$

19.  $b^2 - 7b + 2 = 10$

4.  $c^2 - 11c = -28$

12.  $y^2 - 6y - 3 = 13$

20.  $y^2 + y + 7 = 13$

5.  $a^2 + 2a = 35$

13.  $x^2 - 3x = 18$

21.  $k^2 + 14k = -40$

6.  $y^2 - 10y + 5 = -11$

14.  $d^2 - 5d + 1 = 37$

22.  $p^2 + 7p + 8 = 16$

7.  $x^2 + 10x = -24$

15.  $x^2 + 2x = 24$

23.  $x^2 - 3x - 5 = -7$

8.  $d^2 - 7d - 1 = 17$

16.  $y^2 - 11y - 4 = -28$

24.  $y^2 - 3y = 18$

25.  $4x^2 = 4x + 15$

33.  $5a^2 = 13a - 6$

41.  $5x^2 = -27x - 10$

26.  $10b^2 = 37b + 12$

34.  $c^2 = 5c + 36$

42.  $6y^2 = -11y + 7$

27.  $2y^2 = -9y - 18$

35.  $t^2 = 11t - 24$

43.  $a^2 = 8a - 12$

28.  $c^2 = -4c + 21$

36.  $6x^2 = -11x - 3$

44.  $b^2 = -13b - 42$

29.  $t^2 = -10t - 16$

37.  $y^2 = 2y + 35$

45.  $k^2 = -16k - 63$

30.  $4x^2 = -8x + 5$

38.  $p^2 = 7p + 18$

46.  $4m^2 = -9m + 9$

31.  $3y^2 = 10y - 3$

39.  $w^2 = 14w - 48$

47.  $y^2 = 2y + 8$

32.  $4b^2 = 3b + 1$

40.  $m^2 = -10m - 25$

48.  $6x^2 = 7x - 2$